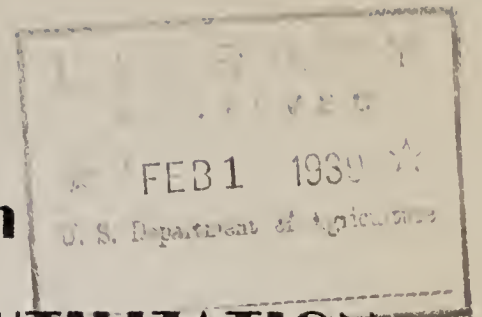


Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.9
F761L
1939



List of Publications on
LOGGING, MANUFACTURE, AND UTILIZATION
OF TIMBER, LUMBER, AND OTHER
WOODEN PRODUCTS



UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
FOREST PRODUCTS LABORATORY
Madison, Wisconsin

In Cooperation with the University of Wisconsin
January 1939

INSTRUCTIONS FOR OBTAINING PUBLICATIONS .

Publications available for distribution at this Laboratory are marked with an asterisk (*).

Single technical notes, reprints, and mimeograph reports may be obtained free upon request from the Director, Forest Products Laboratory, Madison, Wis. A bound volume of the technical notes only, containing the notes listed here and notes dealing with other subjects, in all more than 100 notes, may be purchased for \$1. (This volume does not include the reprints and mimeograph reports mentioned in the list.) Remittance should accompany your order and be made by certified check or postal money order to the Fiscal Agent, U. S. Forest Products Laboratory, Madison, Wis.

Federal Government bulletins, circulars, and leaflets, if not available for free distribution at this Laboratory, may be purchased at the prices indicated, from the Superintendent of Documents, Government Printing Office, Washington, D. C. Send money order, draft, or cash; stamps or personal checks are not accepted.

Trade journals containing articles herein listed may often be purchased from the publishers or may be consulted in various libraries.

The Forest Products Laboratory reserves the right to furnish only those publications which in its judgment will give the information requested. Blanket requests or requests for a large number of copies of any individual article will not be filled except in unusual cases.

TABLE OF CONTENTS

This list includes publications that present the results of research by the Forest Products Laboratory on methods and practices in the lumber producing and wood-consuming industries; standard lumber grades, sizes, and nomenclature; production and use of small dimension stock; specifications for small wooden products; utilization of little-used species and commercial woods; and low-grade and wood-waste surveys. Included also are other Government and commercial publications on these subjects.

	<u>Page</u>
INSTRUCTIONS FOR OBTAINING THESE PUBLICATIONS.....	1
GENERAL ECONOMIC REPORTS.....	4
LOGGING.....	4
(See also UTILIZATION, by species)	
MANUFACTURE.....	7
(See also UTILIZATION, by species)	
MARKETING (FARM AND WOOLLOT TIMBER).....	9
GRADES, SPECIFICATIONS, AND STANDARDIZATION.....	10
Defects and blemishes.....	12
UTILIZATION:	
General reports.....	13
By species.....	15
By states.....	20
By industries.....	20
(See also UTILIZATION, by states, and STATISTICS OF PRODUCTION AND CONSUMPTION)	
Waste.....	23
Small dimension stock.....	24
(See also UTILIZATION, waste)	
MISCELLANEOUS.....	26

T A B L E O F C O N T E N T S (continued)

	<u>Page</u>
STATISTICS OF PRODUCTION AND CONSUMPTION.....	28
OTHER LISTS OF PUBLICATIONS.....	29
OTHER PUBLICATION LISTS ISSUED BY THE FOREST PRODUCTS LABORATORY.....	30

GENERAL ECONOMIC REPORTS

- *Distribution of softwood lumber in the middle west, wholesale distribution, by O. M. Butler. U. S. Dept. Agr., Off. of Sec. Report 115. 1917. (U.S.Dept.Agr. Studies of the lumber industry, Pt. 8.)
- *Distribution of softwood lumber in the middle west, retail distribution, by O. M. Butler. U. S. Dept. Agr., Off. of Sec. Report 116. 1918. (U.S.Dept. Agr. Studies of the lumber industry, Pt. 9.)
- Economic aspects of forest destruction in northern Michigan, by W. N. Sparhawk and W. L. Brush. U. S. Dept. Agr. Tech. Bul. 92. 1929. 25¢.
- *Economic and social importance of a sustained supply of raw material for the wood-using industries in the Lake States, by R. L. Garver. (Paper presented at the Lake States Forestry Conference, Madison, Wis., Apr. 24-25, 1935.) Mimeo. R1060.
- Forest resources of the world, by Raphael Zon and W. N. Sparhawk. 2 v. McGraw-Hill Book Co., Inc., New York City, 1923. \$12.
- Hardwood problem of the northeast, by Austin Cary. Jour.Forestry, Nov.1928.
- National plan for American forestry: report on Senate Resolution 175, by U. S. Forest Service. (Known as Copeland Report.) 2 v. 1933. \$1.75.
- Some public and economic aspects of the lumber industry, by W. B. Greeley. U. S. Dept. Agr., Off. of Sec. Report 114. 1917. Out of print. (May be found in U. S. depository libraries.)
- Timber depletion and the answer: summary of report on timber depletion and related subjects, prepared in response to Senate Resolution 311, by U. S. Forest Serv., U. S. Dept. Agr. Circ. 112. 1920. 5¢.
- Timber depletion, lumber prices, lumber exports, and concentration of timber ownership; Report on Senate Resolution 311, by U. S. Forest Serv. 1920. (Known as Capper Report.) Out of print. (May be found in U. S. depository libraries.)
- Wood for the nation, by W. B. Greeley. U. S. Dept. Agr. Yearbook: Separate 835. 1920. 5¢.

LOGGING

- American logging and sawmill safety code. U. S. Bur. Standards Handbook Ser. 5. 1924. Paper 40¢; cloth 60¢.
- Another reason why small trees should not be cut, by R. L. Garver and R. H. Miller. Jour. Forestry, May 1933.

LOGGING (continued)

*Cutting cull second-growth trees to improve hardwood stands, by J. B. Cuno. South. Lbrman., Dec. 15, 1930.

Cutting hardwood timber in the southern Appalachians, by J. B. Cuno. South. Lbrman., Dec. 15, 1929.

*Cutting the farm woodlot "profitwise," by R. D. Garver. U.S. Dept. Agr. Leaflet 30. 1928.

Don't cut your trees in the roasting-ear stage, by R. D. Garver. Amer. Thresherman, Nov. 1930.

Early history and development of log scaling practice, by C. E. Knouf. West Coast Lbrman., July 15, Aug. 1, 1919.

Efficient logging practice, by R. D. Garver. Forestry in Wisconsin: official report of Wisconsin Commercial Forestry Conference, 1928. p. 94-95. H. L. Ashworth & Co., Milwaukee, Wis. 1928.

Flexible logging equipment aids utilization, by A. H. Hodgson. West Coast Lbrman., Sept. 1, 1926.

*Forest Products Laboratory study to help small mill situation, by C. J. Telford. South. Lbrman., July 15, 1930.

How to reduce the cost of cutting timber, by J. B. Cuno. Hardwood Record, Mar. 10, 1923.

Instructions for appraising stumpage on national forests. U. S. Forest Serv. (Misc.). Rev. 1922. 10¢.

Instructions for the scaling and measurement of national forest timber. U. S. Forest Serv. Rev. 1935. 15¢.

Logging in the Douglas fir region, by W. H. Gibbons. U. S. Dept. Agr. Bul. 711. 1918. 30¢.

*Longleaf pine: costs and returns for logs and trees of different sizes, by R. D. Garver and R. H. Miller. Mar. 1933. Mimeo. R972.

Montana forest and timber handbook, by R. N. Cunningham, S. V. Fullaway, Jr., and C. N. Whitney. Feb. 1926. (State Univ. Montana Studies 1.)

*The portable band sawmill and selective logging in the loblolly pine forests of North Carolina, by R. D. Garver and J. B. Cuno. U. S. Dept. Agr. Tech. Bul. 337. 1932.

Quality of products from permanent operations in Gulf Region, by R. D. Garver. South. Lbrman., Aug. 1, 1931; Amer. Lbrman., Aug. 8, 1931.

LOGGING (continued)

Log scale vs. lumber tally: a discussion of overrun and the factors affecting it, by M. Bradner and Philip Neff. Timberman, July 1926.

Quality vs. size as an index to a profitable tree: loblolly pine, by B. H. Paul. Jour. Forestry, Nov. 1932.

Relation of size of tree to logging costs, stumpage values, and profits, by W. W. Ashe. Amer. Lbrman., Oct. 16, 1926.

Relation of tree size to output for southern hardwoods, by R. L. Garver and R. H. Miller. South. Lbrman., Feb. 15, 1934.

*Sawmills pay more for logs that are correctly bucked, by J. B. Cuno. U. S. Dept. Agr. Yearbook Separate 1233. 1931.

Selective logging and Article X, by R. L. Garver. South. Lbrman., Aug. 15, 1934.

Selective cutting in cross tie operations, by R. L. Garver. Cross Tie Bul., June 1929.

Selective logging in the national forests, by C. B. Morse. Timberman, Nov. 1928.

Selective logging as a protective measure, by R. L. Garver. Ga. Forest Serv. Bul. 11, p. 37-40. 1930.

*Selective logging in the loblolly and longleaf pine forests of South Carolina, by R. L. Garver and J. B. Cuno. Mimeo. R1056. Mar. 1935.

*Selective logging in the loblolly pine-hardwood forests of the Middle Atlantic Coast Plain with special reference to Virginia, by R. L. Garver, J. B. Cuno, C. F. Korstian, and A. L. MacKinney. Va. Forest Serv. Pub. 43. 1931.

*Selective logging in the northern hardwoods of the Lake States, by Raphael Zon and R. L. Garver. U. S. Dept. Agr. Tech. Bul. 164. 1930.

*Selective logging in the shortleaf and loblolly pine forests of the Gulf States Region, by R. L. Garver and R. H. Miller. U. S. Dept. Agr. Tech. Bul. 375. 1933.

*Selective logging of southern pine, by R. L. Garver. Lbr. Trade Jour., Apr. 1, 1930; South. Lbrman., May 1, 1930.

*Selective logging vs. clear cutting in shortleaf pine, by R. L. Garver. Lbr. Trade Jour., Oct. 15, 1930; South. Lbrman., Oct. 15, 1930.

1. The first part of the paper is devoted to a general discussion of the problem.

2. In the second part, we shall consider the special case of a homogeneous medium.

3. The third part is devoted to the study of the properties of the solutions.

4. In the fourth part, we shall discuss the numerical methods used in the calculations.

5. The fifth part is devoted to the study of the stability of the solutions.

6. In the sixth part, we shall consider the case of a non-homogeneous medium.

7. The seventh part is devoted to the study of the properties of the solutions.

8. In the eighth part, we shall discuss the numerical methods used in the calculations.

9. The ninth part is devoted to the study of the stability of the solutions.

10. In the tenth part, we shall consider the case of a non-homogeneous medium.

11. The eleventh part is devoted to the study of the properties of the solutions.

12. In the twelfth part, we shall discuss the numerical methods used in the calculations.

13. The thirteenth part is devoted to the study of the stability of the solutions.

14. In the fourteenth part, we shall consider the case of a non-homogeneous medium.

LOGGING (continued)

Tables for determining contents of standing timber in Minnesota, Michigan, and Wisconsin, comp. by Cloquet Forest Experiment Station and the Lake States Forest Experiment Station. Minnesota Agr. Experiment Station Tech. Bul. 39. 1926.

Timber cutting by selective logging replacing old way, by Raphael Zon. U. S. Dept. Agr. Yearbook 1927, p. 615-17. 1928.

Timber growing and logging practice in the California pine region, by S. B. Show and W. B. Greeley. U. S. Dept. Agr. Bul. 1402. 1926. 10¢.

Timber growing and logging practice in the central hardwood region, by C. R. Tillotson and W. B. Greeley. U. S. Dept. Agr. Bul. 1491. 1917. 15¢.

Timber growing and logging practice in the coast redwood region of California, by S. B. Show and R. Y. Stuart. U. S. Dept. Agr. Tech. Bul. 283. 1932. 5¢.

Timber growing and logging practice in the Douglas fir region, by T. T. Munger and W. B. Greeley. U. S. Dept. Agr. Bul. 1493. 1927. 15¢.

*Timber growing and logging practice in the Lake States, by Raphael Zon. U. S. Dept. Agr. Bul. 1496. 1928.

Timber growing and logging practice in the western white pine and larch-fir forests of the northern Rocky Mountains, by Elers Koch, R. N. Cunningham, and W. B. Greeley. U. S. Dept. Agr. Bul. 1494. 1927. Out of print. (May be found in U. S. depository libraries.)

*White pine production cost and method studies in New England, Forest Products Laboratory Mimeo. R1077, Jan. 1936.

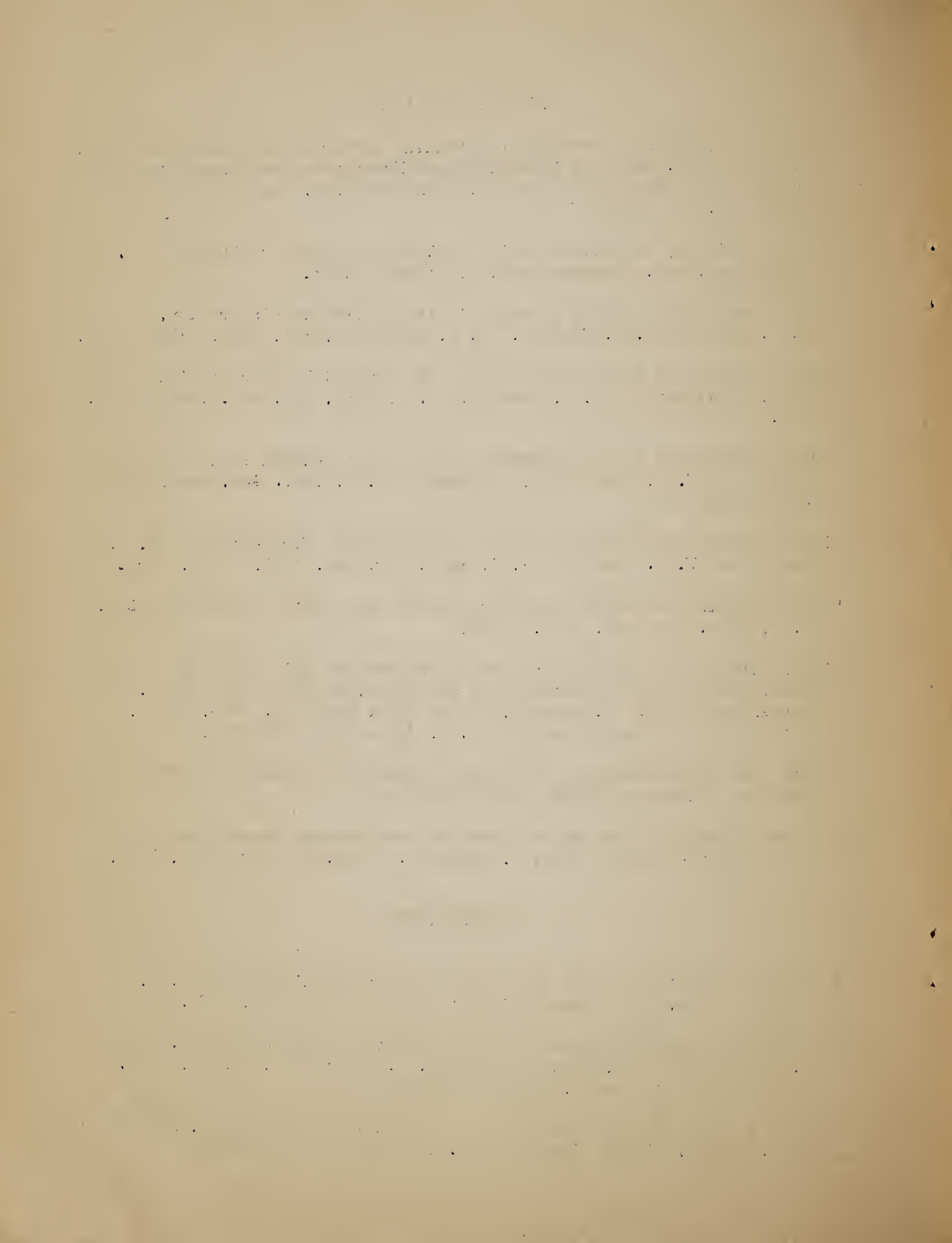
Will sustained yield in lumber operation come through regulation or through competition? by F. J. Hallauer. Jour. Forestry, Nov. 1930.

MANUFACTURE

*Change in moisture content of lumber during rail shipment, by G. E. French. Sept. 1927. Forest Products Laboratory Mimeo. R826.

*Concentration-yard operator can improve lumber from small mills, by C. J. Telford. Lbr. Trade Jour., Apr. 1, 1931; Amer. Lbrman., Apr. 11, 1931; South. Lbrman., Apr. 15, 1931.

*Costs of plain and quarter-sawing southern white oak, by R. L. Garver and R. H. Miller. South. Lbrman., Feb. 15, 1936. Mimeo. R986.



MANUFACTURE (continued)

*How small southern pine mills can reduce their losses, by C. J. Telford. South. Lbrman., Mar. 15, 1933. (Same.--Some figures on profitable improvements among small southern pine mills. Mimeo. R985.)

*An improved design for a portable band mill, by C. J. Telford. Forest Products Laboratory unnumbered mimeograph, Dec. 1935.

Manufacture and seasoning of oak, by L. G. White, Hardwood Record, Aug. 25, Sept. 10, 1921; South. Lbrman., July 30, 1921.

*Operating small sawmills, methods, bibliography, and source of equipment, by C. J. Telford. Forest Products Laboratory Mimeo. R1083, Mar. 1936.

*Portable band sawmills, by R. D. Garver. Amer. Lbrman., July 26, 1930; Jour. Forestry, Dec. 1930.

Portable band sawmills and selective logging in second-growth loblolly pine, by R. D. Garver. Jour. Forestry, Jan. 1933.

Portable sawmills in the utilization of timber in eastern national forests, by S. H. Marsh. South. Lbrman., Nov. 6, 1926.

*Effect of resaw on output of single band mills in southern hardwoods, by R. D. Garver and R. H. Miller. Amer. Lbrman., May 27, 1933.

*Ripping and trimming shortleaf lumber to increase its value, by R. D. Garver. Lbr. Trade Jour., Apr. 15, 1929.

Sawmill cost accounting, by H. B. Oakleaf. West Coast Lbrman., Oct. 15, 1915.

Sawmill efficiency not measured by volume of production: comparison of cutting up logs and sawing lumber in the Inland Empire, by M. Bradner. Timberman, June 1927.

Sawmill's indirect costs often ignored by farmer operators, by C. J. Telford. U. S. Dept. Agr. Yearbook, 1931, p. 469-71.

Sawmills profit by closely controlling thickness of boards, by C. J. Telford. U. S. Dept. Agr. Yearbook, 1931, p. 472-74.

Small sawmill improvement, practical pointers to field agencies:

*Items of cost usually ignored, Forest Products Laboratory Mimeo. R899. 1930.

*Waste from variation in sawing precision. FPL Mimeo. R899-2. 1930.

*When to move portable mills. FPL Mimeo. R899-3. 1931.

*Partial list of wholesaling agencies handling products of small sawmills. FPL Mimeo. R929. 1931.

*Accounting: single logging chance as unit. FPL Mimeo. R899-4. 1931.

*Lipping tanks and truck-loading scaffolds. FPL Mimeo. R899-6. 1931.

*Hardwood grade stick. FPL Mimeo. R899-7. 1932.

*Air seasoning at small mills. FPL Mimeo. R899-8. 1932.

MANUFACTURE (continued)

Small sawmill improvement series (continued):

*A boilerless kiln for portable mills. FPL Mimeo. R899-9. 1933.

*Layouts and sheds for small mills. FPL Mimeo. R899-10. 1933.

*Setting up a ground mill. FPL Mimeo. R899-11. 1935.

*Small sawmill utilization of Appalachian hardwoods for ties, by R. D. Garver. Cross Tie Bul., Mar. 1931. Mimeo. R1086.

Tests of Scandinavian gang saws on Pacific Coast, Report of the Natl. Com. on Wood Utilization, U. S. Dept. Comm. 1929. 10¢.

MARKETING (FARM AND WOODLOT TIMBER)

Amount of solid wood per cord of sticks of different diameters, by Lake States Forest Experiment Station, St. Paul, Minn. 1928.

*Cooperative marketing of woodland products, by A. F. Hawes. U. S. Dept. Agr. Farmers' Bul. 1100. 1920.

*Cutting the farm woods "profitwise," by R. D. Garver. U. S. Dept. Agr. Leaflet 30. 1928.

*Forestry and farm income, by W. R. Mattoon. U. S. Dept. Agr. Farmers' Bul. 1117. 1920.

Forestry lessons on home woodlands, by W. R. Mattoon and Alvin Dille. U. S. Dept. Agr. Bul. 863. Rev. 1930. 10¢.

Logs from the woodlot may be sold profitably on a log-grade basis, by R. H. Miller. U. S. Dept. Agr. Yearbook, 1932.

Making woodlands profitable in the southern states, by W. R. Mattoon. U. S. Dept. Agr. Farmers' Bul. 1071. Rev. 1926. 5¢.

*Marketing dimension stock, by A. O. Benson. South. Lbrman., July 1, 1931; Wood Working Indus., July 1931; Hardwood Record, July 1931; Amer. Lbrman., Aug. 22, 1931.

*Measuring and marketing of farm timber, by W. R. Mattoon and W. B. Barrows. U. S. Dept. Agr. Farmers' Bul. 1210. Rev. 1930.

*Profits from farm woods, by W. R. Mattoon. U. S. Dept. Agr. Misc. Pub. 87. 1930.

*Prospective markets for small hardwoods through mechanical and chemical fabrication, by R. D. Garver. South. Lbrman., Dec. 15, 1930; Central States Forestry Congress Proc. 1930, p. 163-70.

MARKETING (FARM AND WOOLLOT TIMBER) (continued)

Timber measuring on the farm not a difficult task, by W. R. Mattoon.
U. S. Dept. Agr. Yearbook, 1926, p. 712-14. 1927.

*Timber products of the farm woodland: (an interview between C. V. Sweet and Everett Mitchell, N.B.C. broadcast, June 10, 1938). Forest Products Laboratory Mimeo. R1173. 1938.

Timber selling from the farm to consumers, by W. R. Mattoon. U. S. Dept. Agr. Yearbook, 1926, 714-16. 1927.

Woodlot too valuable for pasture use, by C. R. Tillotson. U. S. Dept. Agr. Yearbook, 1926, p. 776-79. 1927.

GRADES, SPECIFICATIONS, AND STANDARDIZATION

*An analysis of the grading of softwood yard lumber in the light of present information on defects and consuming requirements, by E. M. Davis. Forest Products Laboratory Mimeo. R971.

Analysis of hardwood grade proposals. Forest Products Laboratory Report, 1927.

Basic grading rules and working stresses for structural timbers as recommended by the Department of Agriculture, by J. A. Newlin and R. F. A. Johnson. U. S. Dept. Agr. Circ. 295. 1923. Out of print. (May be found in U. S. depository libraries.)

Comparison of grade values in factory use, by G. E. French. South. Lbrman., Dec. 18, 1926.

*The density of southern pine; its significance in terms of properties and grades, by E. M. Davis. South. Lbrman., Dec. 17, 1927.

*Development of lumber standards, by E. M. Davis. Amer. Architect, July 20, 1926.

*Explanation of American lumber standards, by C. V. Sweet. U. S. Dept. Agr. Misc. Pub. 107. 1931.

Grade-marking of lumber for consumers' protection. Report of the National Com. on Wood Utilization of the Dept. of Commerce. 1928. 5¢.

*Guide to the grading of structural timbers and the determination of working stresses, by T. R. C. Wilson. U. S. Dept. Agr. Misc. Pub. 185. 1934.

GRADES, SPECIFICATIONS, AND STANDARDIZATION (continued)

*Hardwood grade stick, by A. C. Wollin. Forest Products Laboratory Mimeo. R899-7. 1932.

How lumber is graded, by H. S. Betts and R. K. Helphenstine. U. S. Dept. Circ. 64. Rev. 1933. 5¢.

Lumber grades suited for various kinds of buildings on the farm, by C. V. Sweet. U. S. Dept. Agr. Yearbook 1928, p. 439-41. 1929.

*Lumber and log grades for southern hardwoods, by R. E. Garver and R. H. Miller. Forest Products Laboratory Mimeo. R980. 1933.

Nearest comparable grades of yard lumber: products cut from various species of softwood. (Chart) U. S. Forest Serv., in cooperation with the Natl. Lbr. Mfrs. Assn., 3d ed. Rev. 1927.

Need of a quality classification for Douglas fir, by J. A. Newlin. Amer. Soc. Testing Materials Proc. v. 16, Pt. 1, 1916, p. 340-43.

Shrinkage of ties in seasoning, by A. T. Upson. Cross Tie Bul., May 1922.

Size of timber, amount of defect, important factors in lumbering, by M. Bradner and S. V. Fullaway, Jr. Timberman, Dec. 1927-Apr. 1928.

Some thoughts on hardwood lumber grading, by A. O. Benson. South. Lbrman., Dec. 20, 1924.

Southern yellow pine timber and density grading rules, by O. T. Swan. Proc. of the 18th annual meeting of the Amer. Soc. Testing Materials, 1915.

Standard grading specifications for yard lumber as recommended by the Dept of Agr., by E. F. Ivory and others. U. S. Dept. Agr. Circ. 296. 1923. Out of print. (May be found in U. S. depository libraries.)

Standardization of softwood factory lumber grades, by E. M. Davis. West Coast Lbrman., Sept. 15, 1925.

Standardization of lumber sizes and grades, by L. G. White, Jour. Forestry, Jan. 1921.

Standard specifications for structural wood joist and planks, beams and stringers, and posts and timbers. Amer. Soc. Testing Materials Standards 1930, Pt. 2, p. 754-814. (1245-30), 25¢.

United States Government master specifications for lumber: softwood, yard, and factory (No. 533A), by U. S. Federal Specifications Board, Rev. 1927. (Mimeo.)

GRADES, SPECIFICATIONS, AND STANDARDIZATION (continued)

*Useless clause in pole specifications, by R. P. A. Johnson. Elect. World, Jan. 17, 1931.

Why should hickory be graded on color specifications? By B. H. Paul. Wood Working Indus., Apr. 1925.

Wood selection rules help but should not be followed blindly, by A. O. Benson. U. S. Dept. Agr. Yearbook, 1928, p. 626-27.

Defects and Blemishes

Avoidable defects and sales appeal, by E. M. Davis. South. Lbrman., Mar. 15, 1932.

*Cause and prevention of blue stain. Forest Products Laboratory Tech. Note 225. Revised 1938.

*Characteristic defects of softwood yard lumber, by E. M. Davis. Forest Products Laboratory Mimeo. R956. 1932.

*The defect characteristic of cypress yard lumber, by E. M. Davis. Forest Products Laboratory Mimeo. R920a.

Destruction by the fungus, Poria incrassata, of coniferous timber in storage and when used in the construction of buildings, by C. J. Humphrey. West Coast Lbrman., Feb. 15, 1923.

Dry-rot in buildings and stored construction materials and how to combat it, by C. J. Humphrey and L. E. Miles. Ala. Polytech. Inst. Circ. 78. 1925.

"Grain" and "texture" with respect to wood: a plea for the closer discrimination in the use of the words, by Arthur Koehler. Hardwood Rec., Feb. 25, 1917.

*Grain of the wood with special reference to the direction of the fibers, by Arthur Koehler. West Coast Lbrman., July 15, 1918; Sci. Amer. Sup., Sept. 7, 1918. Mimeo. R262.

Knots in second-growth pine and the desirability of pruning, by B. H. Paul. U. S. Dept. Agr. Misc. Pub. 307. 1938. 10¢.

*Mill practices that influence the occurrence of sap stain in lumber, by Ira Hatfield. South. Lbrman., Aug. 15, 1935. Mimeo. R1070.

Piling methods and blue stain losses, by E. E. Hubert. South Lbrman., Nov. 1924.

GRADES, SPECIFICATIONS, AND STANDARDIZATION (continued)

Defects and Blemishes (continued)

- Pitch pockets and their relation to the inspection of airplane parts, by J. R. Watkins. Jour. Franklin Inst., Aug. 1919.
- Pith-ray flecks in wood, by H. P. Brown. U. S. Forest Serv. Circ. 215. 1913. Out of print. (May be found in U. S. depository libraries.)
- *Shrinkage in so-called "compression wood." Forest Products Laboratory Tech. Note B-12. 1919.
- Spiral and diagonal grain in wood, by Arthur Koehler. Indus. Arts Mag., May 1924.
- *Yellow stain on hardwood. Forest Products Laboratory Tech. Note 166. 1922.

UTILIZATION

General Reports

- *Artificial aging of wood for paneling. Forest Products Laboratory Memo. R965. Apr. 1932.
- Commercial woods of the Pacific Coast, by C. W. Gould. Timberman, Feb. 1920; Apr. 1922.
- *Efficient forest utilization, a major factor in an effective national forest policy, by C. P. Winslow. Jour. Forestry, Jan. 1924; Paper Trade Jour., Mar. 13, 1924; Misc. Memo.
- *Factory outlets for short length softwood yard lumber. Forest Products Laboratory Tech. Note 216.
- Genesis of a veteran of the forest, by R. L. Garver. Amer. Librarian., Sept. 10, 1927.
- How wood losses occur, by R. H. Colley. Wood Pres. News, Dec. 1924.
- *Industrial outlets for short-length softwood yard lumber, by E. M. Davis. U. S. Dept. Agr. Circ. 393. 1926.
- Interdependence of utilization and silviculture, by E. H. Clapp. Jour. Forestry, Mar. 1926.

UTILIZATION (continued)

General Reports (continued)

- *Looking forward to better forest utilization, by C. P. Winslow. Amer. Lbrman., Jan. 4, 1930; South Lbrman., Jan. 1, 1930.
- Possibilities of more complete forest utilization in the Lake States, by integration of industries, by R. L. Garver. Amer. Lbrman., June 16, 1928.
- *Properties and uses of some of the more important woods grown in Brazil, by E. E. Horn. Forest Products Laboratory Mimeo. R83. 1918.
- Reducing degrade loss on southern pine by \$3 to \$4.50 per M, by A. C. Knauss. Lbr. Mfr. & Dealer, Oct. 31, 1924.
- Relation of utilization to the profitable growing of trees, by C. P. Winslow. Address delivered at the Commercial Forestry Conference, Charleston, Dec. 4-5, 1929; West Virginia Wild Life, Mar. 1930; Jour. Forestry, Apr. 1930.
- Report of the national conference on utilization of forest products, Washington, D.C., Nov. 19-20, 1924. U. S. Dept. Agr. Misc. Circ. 39. 1925. 20
- Role of utilization in industrial forestry, by R. L. Garver. South. Lbrman., Mar. 15, 1930.
- Sap stain problem and a ten million dollar loss, by E. E. Hubert. Hardwood Rec., Mar. 10, 1924; South. Lbrman., Feb. 16, 1924; Timberman, Feb. 1924; West Coast Lbrman., Mar. 15, 1924.
- *Second-growth southern hardwood timber, by B. H. Paul. South Lbrman., Dec. 15, 1936. Mimeo. R1120.
- Sawmill efficiency not measured by volume of production: comparison of cutting up logs and sawing lumber in the Inland Empire, by M. Bradner. Timberman, June-Aug. 1927.
- *Short lengths of softwoods in the industries, by E. M. Davis. Timberman, Sept. 1925; Amer. Lbrman., Aug. 15, 1925.
- Small sawmill utilization of Appalachian hardwoods:
Pt. 1 -- Lumber, by R. L. Garver and R. H. Miller. 1930. Out of print.
*Pt. 2 -- Ties, timbers, and lumber, by R. L. Garver and J. B. Cuno. 1930. Forest Products Laboratory Mimeo. R888. (Summary in Cross Tie Bul., Mar. 1931. Mimeo. R1086.)
- *Substitution of other materials for wood, by Rolf Thelen. U. S. Dept. Agr. Off. of Sec. Rept. 117. 1917.
- Tie futures and forestry, by R. L. Garver. Cross Tie Bul., June 1931.

UTILIZATION (continued)

General Reports (continued)

*Utilization of blue-stained lumber. Forest Products Laboratory Tech. Note 184. 1923.

Utilization studies in the Douglas fir region, by W. H. Gibbons. Timberman, Aug. 1926.

Utilizing low-grade lumber in furniture, by B. L. Lain. Furn. Mfr. & Artisan, Nov. 1924.

Western woods for cores in veneered panels, by T. R. Truax. Furn. Mfr. & Artisan, Nov. 1923; Timberman, Nov. 1923.

What forests give, by M. B. Bruère, U. S. Forest Serv. unnumbered publication. 1938. 15¢.

*Wooden snow fencing for highways, by G. C. Morbeck. Amer. Lbrman., Dec. 10, 1932.

Wood, the material of today and tomorrow (radio talk broadcast by G. W. Trayer). South. Lbrman., Oct. 1, 1936.

*Wood, a material with a future, by F. J. Champion. Wis. Carpenter & Bldr., Convention Number, 1936. Mimeo. R1119.

*Wood slat snow fence, by A. O. Benson. Forest Products Laboratory Mimeo. R1085. Apr. 1936.

Wood preservation and utilization in Europe, by G. M. Hunt. Railway Age, Jan. 29, 1927.

*Wood seats for stadiums, by R. M. Wirka. Eng. News-Record, Apr. 20, 1931. Forest Products Laboratory Mimeo. R1006.

Wood waste prevention, by Rolf Thelen. In U. S. Dept. Agr. Misc. Circ. 39, p. 83-100. 1925. 20¢.

Woods for springboards, by R. P. A. Johnson. (Letter) Amer. Lbrman., Sept. 1, 1934.

By Species

U. S. Forest Service Foreign Woods' Series:

*Lignumvitae.

*Teak.

UTILIZATION (continued)

By Species (continued)

U. S. Forest Service American Woods' Series:

*Ash	*Cottonwood	*Persimmon
*Aspen	*Cypress, southern	*Pine, lodgepole
*Basswood	*Dogwood	* " , northern white
*Beech	*Douglas fir	* " , ponderosa
*Birch	*Elm	* " , sugar
*Cedar, Alaska	*Fir, white and	* " , southern
* " , eastern red	lowland white	* " , western white
* " , incense	*Gum, red	*Poplar, balsam
* " , northern white	*Hemlock, eastern	* " , yellow
* " , Port Orford	* " , western	*Redwood
* " , southern white	*Hickory	*Spruce, eastern
* " , western red	*Larch, western	* " , Sitka
*Cherry, black	*Locust, black	*Sycamore
*Chestnut	*Maple	*Tupelo
	*Oak	*Walnut, black

Red alder of the Pacific Northwest: its utilization with notes on growth and management, by H. M. Johnson and others. U. S. Lept. Agr. Bul. 1437. 1926. Out of print. (May be found in U. S. depository libraries.)

*Light weight ash should be separated in shipping, by B. H. Paul. Wood Working Indus., Mar. 1930. Mimeo. R1153.

*Relation of growth factors to wood quality -- white ash, by B. H. Paul. Lbr. Trade Jour., Oct. 1, 1929.

*Utilization of ash, by W. L. Sterrett. U. S. Dept. Agr. Bul. 523. 1917.

Aspen: availability, properties, and utilization, by R. P.A. Johnson, Joseph Kittredge, Jr., and H. C. Schmitz. Minn. Agr. Exp. Sta. Tech. Bul. 70. 1930.

A forest that "just grew": aspen, a weed species in the Lake States, demonstrates survival values and begins contributing to our forest wealth, by T. J. Mosley. Amer. Forests, Oct. 1931.

*Some references on balsa and other light-weight woods. U. S. Forest Products Laboratory Mimeo. R1152, Oct. 1937.

*Utilization of basswood, by W. L. Brush. U. S. Lept. Agr. Bul. 1007. 1922.

Incense cedar, by J. A. Mitchell. U. S. Dept. Agr. Bul. 604. 1918. Out of print. (May be found in U. S. depository libraries.)

*Western red cedar, its characteristics and uses, by R. M. Volkert. British Columbia Lbrman., Mar. 1924. Mimeo. R3.

UTILIZATION (continued)

By Species (continued)

Southern white cedar, by C. F. Korstian and W. D. Brush. U. S. Dept. Agr. Tech. Bul. 251. 1931. 25¢.

*Chestnut as a core wood, by G. C. Morbeck. Wood Workers Jour., Nov. 1930; Furn. Mfr., Nov. 1930; Appalachian Hardwood Club Brochure No. 4, Nov. 1930; Wood Construction, Oct. 15, 1930; Wood Working Indus., Oct. 1930.

*Chestnut poles from man-killed and blight-killed trees, by R. P. A. Johnson. Purchasing Agent, July 1931; Hardwood Rec., Dec. 1930.

*Blight-infected chestnut as durable as sound chestnut. Forest Products Laboratory Tech. Note 174.

Getting the good of a doomed species (chestnut), by R. D. Garver. Hardwood Rec., Aug. 10, 1926.

*Inexpensive paneled rooms of chestnut, by C. V. Sweet. Good Housekeeping, Apr. 1932.

Logs and leather: the chestnut -- from tree to tannin, by M. A. Mattoon. Amer. Forests & Forest Life, Nov. 1926.

*Principal uses of chestnut, by G. C. Morbeck, R. P. A. Johnson, and C. V. Sweet. Hardwood Rec., July 1931.

*The use of chestnut for boxing and crating, by R. P. A. Johnson. Purchasing Agent, Feb. 1931; Same.--Suitability of chestnut for boxes and crates, Barrel & Box & Packages, Jan 1931.

*Utilization guide for blight-killed chestnut. Forest Products Laboratory Tech. Note 224.

Southern cypress, by W. R. Mattoon. U. S. Dept. Agr. Bul. 272. 1915. Out of print. (May be found in U. S. depository libraries.)

*Utilization of dogwood and persimmon, by J. B. Cuno. U. S. Dept. Agr. Bul. 1436. 1926.

*Utilization of elm, by W. D. Brush. U. S. Dept. Agr. Bul. 683. 1918.

Is eucalyptus suitable for lumber? by H. D. Tiemann. Soc. Amer. Foresters Proc., Oct. 1913.

1871

1872

1873

1874

1875

1876

1877

1878

1879

1880

1881

1882

1883

1884

1885

1886

1887

UTILIZATION (continued)

By Species (continued)

Properties and uses of Douglas fir, by McGarvey Cline and J. B. Knapp. U. S. Forest Serv. Bul. 88. 1911. Out of print. (May be found in U. S. depository libraries.)

*Properties of white fir and their relation to the manufacture and uses of the wood, by R. P. A. Johnson and M. R. Brundage. U. S. Dept. Tech. Bul. 408. 1934.

White fir lumber for small house construction, by R. P. A. Johnson. Amer. Lbrman., Dec. 14, 1929.

*Greenheart: a timber with exceptional qualities, by A. K. Armstrong. Engin. News-Record, Jan 29, Feb. 6, 1916; Mimeo. R595.

*Black gum is no longer a "black sheep": now a valuable wood, by G. C. Morbeck. Memphis Lbrman., Apr.-June 1929.

*Red gum: the versatile hardwood, by G. C. Morbeck. Memphis Lbrman., Jan.-Feb. 1932.

*Properties of western hemlock and their relation to uses of the wood, by R. P. A. Johnson and W. H. Gibbons. U. S. Dept. Agr. Tech. Bul. 139. 1929.

Commercial hickories, by A. T. Boisen and J. A. Newlin. U. S. Forest Serv. Bul. 80. 1910. Out of print. (May be found in U. S. depository libraries.)

*How growth affects quality in hickory and ash, by B. H. Paul. Hardwood Rec., Jan. 10, 1925.

*Quality of Appalachian hickory, by B. H. Paul. South. Lbrman., Apr. 6, 1929.

*Red hickory as strong as white hickory. Forest Products Laboratory Tech. Note 171.

*Properties of western larch and their relation to uses of the wood, by R. P. A. Johnson and M. Bradner. U. S. Dept. Agr. Tech. Bul. 285. 1932.

*Utilization of black locust, by J. B. Cuno. U. S. Dept. Agr. Circ. 131. 1930.

UTILIZATION (continued)

By Species (continued)

- History of shipmast locust, by S. B. Detweiler. Jour. Forestry, Aug. 1937.
- Identification of true mahogany, certain so-called mahoganies, and some common substitutes, by Arthur Koehler. U. S. Dept. Agr. Bul. 1050. 1922. Out of print. (May be found in U. S. depository libraries.)
- True mahogany, by C. L. Mell. U. S. Dept. Agr. Bul. 474. 1917. Out of print. (May be found in U. S. depository libraries.)
- *Judging the quality of sugar maple, by B. H. Paul and N. A. Norton. Wood Products, Mar. 1936.
- Utilization of bigleaf maple of the Pacific Northwest, by H. M. Johnson. U. S. Dept. Agr. Circ. 225. 1932. 5¢.
- Overcup oak for lumber, by R. L. Garver. South. Lbrman., Mar. 1935.
- Swamp chestnut oak for lumber, by R. L. Garver. South. Lbrman., Aug. 15, 1934.
- Substitution of oak for other woods, by D. G. White. Hardwood Rec., Aug. 10, 1921; South. Lbrman., July 23, 1921.
- Water oak for lumber, by R. L. Garver. South. Lbrman., June 15, 1934.
- *Pecan: its characteristics and uses, by G. C. Morbeck. Memphis Lbrman., June 1927.
- Jack pine, by W. D. Sterrett. U. S. Dept. Agr. Bul. 820. 1920. Out of print. (May be found in U. S. depository libraries.)
- Loblolly or North Carolina pine, by W. W. Ashe. N. C. Geol. & Econ. Survey Bul. 24. 1915.
- Utilization and management of lodgepole pine in the Rocky Mountains, by L. T. Mason. U. S. Dept. Agr. Bul. 234. 1915. 15¢.
- Longleaf pine, by W. R. Mattoon. U. S. Dept. Agr. Bul. 1061. 1922. 15¢.
- *Reducing bowing and crooking of lumber cut from second-growth southern yellow pine, by B. H. Paul. South. Lbrman., Jan. 1, 1938.
- Rapid growth hazards usefulness of southern pine, by Arthur Koehler. Jour. Forestry, Feb. 1938.
- *Shortleaf pine: the lumber-making qualities of second-growth and virgin-growth timber, by E. M. Davis. South. Lbrman., Dec. 15, 1929.

UTILIZATION (continued)

By Species (continued)

Small sawmill utilization of shortleaf pine, by R. L. Garver. South. Lbrman., Nov. 5, 1927.

Southern pine forestry in 1950, by R. L. Garver. South. Lbrman., Oct. 1, 1929; Lbr. Trade Jour., Oct. 1, 1929; Amer. Lbrman., Sept. 21, 1929.

*Southern yellow pine. Forest Products Laboratory Tech. Note 214.

Sugar pine, by L. T. Larsen and T. D. Woodbury. U. S. Dept. Agr. Bul. 426. 1916. Out of print. (May be found in U. S. depository libraries.)

*The white pines. Forest Products Laboratory Tech. Note 215.

Yellow poplar, the money maker, by W. W. Ashe. South. Lbrman., Dec. 18, 1926.

*Variations in the wood of yellow poplar from the Southern Appalachian Region, by B. H. Paul and N. A. Norton. South. Lbrman., Mar. 15, 1937.

Quebracho wood and its substitutes, by C. D. Mell and W. D. Brush. U. S. Forest Serv. Circ. 202. Out of print. (May be found in U. S. depository libraries.)

*California redwood, its properties and uses, by R. M. Volkert. Forest Products Laboratory Mimeo. R815. 1925.

*The strength and related properties of redwood, by R. F. Luxford and L. J. Markwardt. U. S. Dept. Agr. Tech. Bul. 305. 1932.

Sitka spruce: its uses, growth, and management, by N. L. Cary. U. S. Dept. Agr. Bul. 1060. 1922. Out of print. (May be found in U. S. depository libraries.)

Utilization of sycamore, by W. D. Brush. U. S. Dept. Agr. Bul. 884. 1920. Out of print. (May be found in U. S. depository libraries.)

Uses of western woods, by E. J. Hanzlik (in his Trees and Forests of Western United States, p.118-24). Portland, Ore., Four-L-Lbr.News, 1928. \$2.50.

Black walnut for timber and nuts, by W. R. Mattoon and C. A. Reed. U. S. Dept. Agr. Farm. Bul. 1392. 1924. Rev. 1933. 5¢.

Selling black walnut timber, by W. D. Brush. U. S. Dept. Agr. Farm. Bul. 1459. Rev. 1926. 5¢.

*Utilization of black walnut, by W. D. Brush. U. S. Dept. Agr. Bul. 909. 1921.

UTILIZATION (continued)

By Species (continued)

Circassian walnut, by G. B. Sudworth and C. L. Mell. U. S. Forest Serv. Circ. 212. 1913. Out of print. (May be found in U. S. depository libraries.)

Willows: their growth, use, and importance, by G. N. Lamb. U. S. Dept. Agr. Bul. 316. 1915. Out of print. (May be found in U. S. depository libraries.)

Basket willow culture, by G. N. Lamb. U. S. Dept. Agr. Farm. Bul. 622. 1914. 5¢.

By States

*List of publications on wood-using industries and timber marketing, as issued by various states. Forest Products Laboratory Mimeo, R926. 1931.

By Industries

Aircraft

*Aircraft woods: their properties, selection, and characteristics, by L. J. Markwardt: Report No. 354, Natl. Advisory Committee for Aeronautics. 1930. Mimeo. R1079.

*Future of wood in aircraft construction, by G. W. Trayer. South. Lbrman., Dec. 15, 1930.

Wood in aircraft construction. Prepared by the Forest Products Laboratory. U. S. Navy, Bur. of Construction & Repair. Aircraft design data Note No.12, 1919. Out of print.

Buildings

*Selection, installation, finish, and maintenance of wood floors for dwellings, by R. K. Helphenstine, Jr. U. S. Dept. Agr. Circ. 489. 1938.

Selection of lumber for farm and home building, by C. V. Sweet and R. P. A. Johnson. U. S. Dept. Agr. Farm. Bul.1756. 1936. 5¢.

(1911)

(1912)

(1913)

(1914)

(1915)

(1916)

(1917)

(1918)

(1919)

(1920)

(1921)

(1922)

(1923)

(1924)

(1925)

(1926)

(1927)

(1928)

(1929)

(1930)

(1931)

(1932)

(1933)

(1934)

(1935)

(1936)

(1937)

(1938)

(1939)

(1940)

(1941)

(1942)

UTILIZATION (continued)

By Industries (continued)

Containers

*Brief description of the manufacture of beer and whiskey barrels, Forest Products Laboratory Mimeo. R1030. May 1934.

*Description of the tests made of southern hardwoods for butter boxes and tubs. Barrel & Box & Packages, Oct. 1934.

*Oak beer barrels must prepare to meet keen competition, by R. P. A. Johnson. Brewery Age, Jan. 1934. Mimeo. R1027.

Tests of woods for butter containers with reference to imparting odor and flavor, by E. M. Davis. U. S. Dept. Agr. Misc. Pub. 250. 1936. 5¢.

*A treatment for red oak beer kegs. Misc. Mimeo. Mar. 1934.

*Use of wood by the fruit and vegetable industries of Florida, by J. B. Cuno. Mimeo. R1097. July 1936.

Cross Arms

Strength tests of cross-arms, by T. R. C. Wilson. U. S. Forest Serv. Circ. 204. 1912. Out of print. (May be found in U. S. depository libraries.)

Furniture

Chair manufacture in Oregon and Washington, by W. H. Gibbons and H. M. Johnson. West Coast Lbrman., May 1, 1925.

Economic development of the furniture industry of the South and its future dependence upon forestry, by C. F. Korstian. N. C. Div. of Forestry, Econ. Paper 57. 1926.

Lumber consumption trends in the furniture industry: a progress report of the forest survey requirements phase, by R. P. A. Johnson. 1938.
(Available from the U. S. Forest Service, Washington, D. C.)

Oregon and Washington furniture industry, by W. H. Gibbons and H. M. Johnson. Timberman, Apr. 1925.

Planing Mill Products

Doors made from lumber of different moisture values, by J. B. Cuno. Wood Working Indus., Feb. 1932.

*Wooden doors, by G. E. Heck. Timberman, Apr. 1936. Mimeo. R1104.

UTILIZATION (continued)

By Industries (continued)

Poles and Posts

Pole timber of the Northwest: detailed data covering an important branch of the Pacific Northwest lumber industry, by W. H. Gibbons. West Coast Lbrman., May 1, 1926.

Ship Building

Douglas fir ship building, by H. B. Oakleaf. Portland, Ore., Peninsula Shipbuilding Co. 1916.

Ties and Timbers

Application of mechanical power in tie production, by C. J. Telford. Cross Tie Bul., Sept. 1936.

Cross ties bought by weight in Belgium, by G. M. Hunt. Cross Tie Bul., Nov. 1926.

Importance of cross tie industry in our program of forest thrift, by R. L. Garver. Natl. Assn. Railroad Tie Producers' Proc. 1926, p.63-9.

*Small sawmill utilization of Appalachian hardwoods for ties, by R. L. Garver and J. B. Cuno. Cross Tie Bul., Mar. 1931. Mimeo. R1086.

*Tests indicate the suitability of woods for crossties, by L. J. Markwardt. Ry. Eng. & Maintenance, Jan. 1931. Mimeo. R910.

Mine timber, its selection, storage treatment, and use, by R. R. Horner and H. E. Tufft. Bur. of Mines, Dept. Interior in cooperation with the Forest Serv., Dept. Agr., U.S. Bureau Mines Bul. 235. 1925. 30¢.

Strength of mine timbers, by R. F. A. Johnson. Mining Cong. Jour., Feb. 1924.

Timber requirements for mines in the United States, by W. L. Brush. U. S. Forest Serv., 1938.

Vehicles

Lumber used in motor vehicle manufacture, by Arthur Koehler. Automotive Indus., May 26, 1921.

Suitability of various woods for use in heavy wagons, by L. G. White. South. Lbrman., Dec. 20, 1919.

Wood in automobile body, by A. T. Upson and L. N. Erickson. Soc. Automotive Engin. Jour., Feb. 1924.

UTILIZATION (continued)

By Industries (continued)

Veneer and Plywood

*Manufacture of veneer. Forest Products Laboratory Mimeo. R285. 1925.

*Properties of ordinary wood compared with plywood. Forest Products Laboratory Tech. Note 131.

Protection of flush veneered entrance doors, by W. E. Griffee. Millwork, Mar. 1930.

Miscellaneous

Data on hockey stick manufacture, by C. V. Sweet. Wood Working Indus., June 1932.

*Excelsior and its manufacture. Forest Products Laboratory Misc. Mimeo. 1932.

Handling and working of lumber for Venetian blinds, by G. C. Morbeck. Timberman, Dec. 1937; Amer. Lbrman., Nov. 20, 1937; South. Lbrman., Dec. 15, 1937; Wood Products, Nov.-Dec. 1937.

*Hickory for handles, by R. K. Helphenstine, Jr. Wood Turning, Feb. 1920.

*Importance of proper woods for Venetian blinds, by G. C. Morbeck. South. Lbrman., May 1, 1937.

Production of maple sirup and sugar, by A. H. Bryan and others. U. S. Dept. Agr. Farm. Bul. 1366. 1924. 5¢

*Use of wood in American machinery, by G. C. Morbeck. Hardwood Rec. (beginning in July 1936 issue for several numbers). Mimeo. R1100.

*Use of wood in chemical apparatus, by A. W. Schorger. Metall. & Chem. Engin., May 15, 1918; Mimeo. R512.

Woods for springboards, by R. P. A. Johnson. (Letter) Amer. Lbrman., Sept. 1, 1934.

Waste

Better forestry through better utilization, by A. T. Upson. Jour. Forestry, May 1922.

UTILIZATION (continued)

Waste (continued)

- *Briquetting of wood waste. Forest Products Laboratory Mimeo. R842. 1929.
- *Definitions and classifications of waste in cutting factory lumber. Forest Products Laboratory Mimeo. R1149. Sept. 1937.
- *Forest Products Laboratory's work on plastics from wood lignin. Forest Products Laboratory Mimeo. R1134. Apr. 1937.
- *Limitations to the use of sawdust. Forest Products Laboratory Tech. Note 167. 1922.
- *Outlets for wood waste. Forest Products Laboratory Mimeo. R64. 1937.
- *Putting wood waste to work, by S. T. Lana. U. S. Dept. Agr. Yearbook Separate 856. 1920.
- Sawdust and wood flour. Report of Natl. Committee on Wood Utilization, Dept. of Commerce. 10¢.
- *Use of sawdust and shavings. Forest Products Laboratory Mimeo. R944. 1932.
- *Utilization of wood formerly wasted, by T. J. Mosley. Mfrs. Record, Mar. 3, 1932. Mimeo. R1123.
- *Chemical utilization of wood waste, by L. F. Hawley. Jour. of Forestry, Feb. 1931. Mimeo. R945.
- *Wood flour: a general statement of the manufacture and use of wood flour and the status of the industry. Forest Products Laboratory Mimeo. R565. 1934.

Small Dimension Stock

- *Advantages of ready-cut dimension stock. Forest Products Laboratory Tech. Note 178.
- *Better bundling of dimension stock, by A. O. Benson. South. Lbrman., Dec. 15, 1932.
- Clearing a right of way for small dimension stock, by A. O. Benson. Hardwood Record, Oct. 25, 1924.
- *Cutting the full woods run to dimension, by A. O. Benson. Wood Working Indus., June 1925.

UTILIZATION (continued)

Small Dimension Stock (continued)

- *Cutting sizes of furniture lumber, by A. O. Benson. Furn. Mfr., May 1928.
- Dimension lumber industry of the northeastern states, by R. M. Volkert.
Wood Working Indus., June-Sept. 1927.
- *Dimension stock: careful piling for air seasoning minimizes loss, by A. O. Benson. Amer. Lbrman., July 4, 1931; South Lbrman., Nov. 15, 1930.
- *Dimension stock from hardwoods of the Lake States, by A. O. Benson. Hardwood Rec., Mar.-Apr. 1931; Amer. Lbrman., June 27, 1931.
- *Dimension stock marketing, by A. O. Benson. South Lbrman., July 1, 1931; Amer. Lbrman., Aug. 22, 1931; Wood Working Indus., July 1931; Hardwood Rec., July 1931.
- *Dimension stock methods for New England hardwoods, by A. O. Benson. U. S. Dept. Agr. Circ. 394. 1936.
- *Dimension stock production cost keeping, by A. O. Benson. Wood Working Indus., May 1931; South Lbrman., May 15, 1931; Hardwood Rec., June 1931; Amer. Lbrman., Aug. 15, 1931.
- *Dimension stock -- warping of maple and birch cut-up material, by O. W. Torgeson. Amer. Lbrman., Sept. 12, 1932.
- Drying birch dimension stock for chairs, by R. H. Grabow. Furn. Mfr. & Artisan, Oct. 1924.
- Greater yield from logs, by A. O. Benson. South Lbrman., Oct. 18, 1924.
- Laboratory's investigations of the wood turning industry, by A. T. Upson. Wood Turning, Aug. 1923.
- *Manufacture of dimension stock from northern hardwoods, by A. O. Benson. U. S. Dept. Agr. Circ. 163. 1931.
- Production and use of small dimension stock in the chair industry, by A. T. Upson and A. O. Benson. Chicago Assn. of Wood-Using Indus., 1923. \$2.25.
- *Seasoning of dimension stock, by O. W. Torgeson. (Pt. 1) Wood Working Indus., June 1932, (Pt. 2) Furn. Index, Oct. 1932.
- Small dimension stock, its production from lumber at the factory, by A. T. Upson. Lbr. Trade Jour., July 1, 1922; Natl. Hardwood Lbr. Assn. Proc., June 22-23, 1922.

UTILIZATION (continued)

Small Dimension Stock (continued)

Small dimension stock, its seasoning, handling, and manufacture. Rept. of Natl. Comm. on Wood Utilization, U. S. Dept. Commerce. 10¢.

Standardization and the dimension stock problem with special reference to wood turning, by A. T. Upson. Wood Turning, July 1921.

Taking stock of dimension stock, by A. O. Benson. Memphis Lbrman., Mar. 1930.

MISCELLANEOUS

*American importers and dealers in foreign cabinet woods. U. S. Dept. Com., Bur. of Foreign & Dom. Com. Forest Products Div. 1937.

Chain saw for girdling, by J. B. Cuno. Jour. Forestry, May 1937.

Check list of the forest trees of the United States: their names and ranges, by G. B. Sudworth. U. S. Dept. Agr. Misc. Circ. 92. Rev. 1927. Out of print. (May be found in U. S. depository libraries.)

*Chinking materials for log cabins. Forest Products Laboratory Mimeo. 1938.

*Effect of time of cutting timber on its durability. Forest Products Laboratory Tech. Note F-15.

Experiments in the planing of hardwoods, by E. M. Davis. Amer. Soc. Mech. Engrs., Transactions, Jan. 1938. (Same.--abstract of above, Hardwood Rec., Mar. 1938.)

Famous trees, by C. E. Randall and D. P. Edgerton. U. S. Dept. Agr. Misc. Pub. 295. 1938. 15¢.

*Fifty years ahead -- a research viewpoint, by C. P. Winslow. Forest Products Laboratory Mimeo. R1072. Nov. 1935.

*The Forest Products Laboratory, a brief account of its work and aims. U. S. Dept. Agr. Misc. Pub. 306. 1938.

*Government publications of general interest on wood and trees. Forest Products Laboratory Tech. Note L-6. Rev. 1937.

*Hardwoods of the South. Forest Products Laboratory pamphlet. Dec. 1935.

*Holding the market for wood, by C. V. Sweet. South. Lbrman., Dec. 15, 1935. Mimeo. R1103.

MISCELLANEOUS (continued)

*A hundred definitions pertaining to wood and other forest products.
Forest Products Laboratory Tech. Note 240. 1932.

Improved harvesting and utilization of the current timber crop, by C. V.
Sweet. Jour. Forestry, Sept. 1938.

Influence of growth conditions upon the properties of wood, by B. H.
Paul. Jour. Forestry, Nov. 1924.

Laboratory looks at wood: some new developments in wood utilization, by
C. P. Winslow. Hardwood Rec., Oct. 1938.

*Log buildings, by S. A. Witzel. University of Wisconsin, Extension
Serv. Stencil 158. Mar. 1935.

*Lumber manufacturing, wood-using, and allied associations (a list).
U. S. Forest Serv., 1938.

*Machining and related properties of southern hardwoods, by E. M. Davis.
South. Lbrman., Dec. 15, 1936.

*Making log cabins endure, by G. M. Hunt. Mimeo. R982. June 1933.

*Pertinent facts on salvage of New England Timber. Forest Products Labo-
ratory Mimeo. R1183. Nov. 1938.

*Power pruning, by J. B. Cuno. Jour. Forestry, Aug. 1935.

*Recent tests in planing southern and other hardwoods, by E. M. Davis.
South. Lbrman., Dec. 15, 1937.

*Research in forest products, annual report 1938. Forest Products Labora-
tory Mimeo. R1174.

Rough method for estimating the specific gravity of wood, by B. H. Paul.
South. Lbrman., Mar. 1, 1938; Wood Products, Mar. 1938.

*Sidelights on southern hardwoods, by E. M. Davis. South Lbrman., Dec.
15, 1934.

*Some books on wood. Forest Products Laboratory Mimeo. R399. 1938.

*Some common fallacies about wood. Forest Products Laboratory Mimeo. R1167.
1938.

*Some machining and related properties of hackberry, by E. M. Davis.
South. Lbrman., Dec. 15, 1938.

MISCELLANEOUS (continued)

Stumpage and log prices for the calendar year 1935, comp. by H. B. Steer.
U. S. Dept. Agr. Statis. Bul. 57, 1937. 10¢. Same.--1936. U. S.
Dept. Agr. Statis. Bul. 62. 10¢.

Stumpage prices of privately owned timber in the United States, by H. B.
Steer. U. S. Dept. Agr. Tech. Bul. 626. 1938. 20¢.

*Subject index to technical notes (of the Forest Products Laboratory).

*Texture of southern hardwoods and locality of growth, by E. M. Davis.
South. Lbrman., Dec. 15, 1933.

*Turning qualities of southern hardwoods, by E. M. Davis. Hardwood Rec.,
Aug. 1935; Memphis Lbrman., Aug. 1935. Mimeo. R1101.

United States as a market for tropical forest products, by W. B. Greeley.
Pan-American Union Bul. 3. Apr. 1925.

Use of logs and poles in farm construction, by T. A. H. Miller. U. S.
Dept. Agr. Farm. Bul. 1660. 1935. 5¢.

*Weights of various woods grown in the United States. Forest Products
Laboratory Tech. Note 218. Rev. 1931.

Wood utilization, by J. B. Cuno. Penn State Sylvan, 1936.

Wood handbook: basic information on wood as a material of construction
with data for its use in design and specifications, by Forest Products
Laboratory. U. S. Dept. Agr. unnumbered publication, 1935. 35¢.

*Wood use trends in Europe, by C. P. Winslow. Amer. Forests, Oct. 1938.

*Wooden mattresses for Old Man River, by E. M. Davis. Amer. Forests,
Oct. 1937.

STATISTICS OF PRODUCTION AND CONSUMPTION

(Publications of the U. S. Bureau of the Census
Washington, D. C.)

Cooperage -- See Lumber.

Distillation -- 1932. Wood distillation and charcoal manufacture, 1931. 5¢.

Excelsior -- See General: Forest products.

STATISTICS OF PRODUCTION AND CONSUMPTION (continued)

General: Forest Products -- Manufacture, 1929, miscellaneous forest products industries (15th census, 1930). 1932. 15¢.

Lumber -- 1937 Principal lumber industries, lumber and timber products, planing-mill products, boxes, wooden cooperage. 1931. 10¢. (Issued biennially, 1925 to date.)

1936 Forest products: Lumber, lath, and shingles. 5¢. (Issued biennially, 1922 to date.)

1936 Lumber, distribution, and consumption.

1932 Lumber used in manufacture: 1933 summary tables: canvass conducted in cooperation with the U. S. Dept. of Com., Bur. of the Census: preliminary statistics, forest survey of the United States. Published by U. S. Forest Serv., 1934.

1925 Lumber and allied products. 1927. (Census of manufactures, 1925.) 15¢.

Mines -- 1923. Forest products: mine timber used underground. 1925. 5¢.

Poles -- 1931. Forest products: crossties and poles purchased and preserved. 1931. 5¢.

Pulpwood -- 1932. Forest products: Paper and paper board, production and paper-making equipment in use, pulpwood consumption, and wood pulp production. 1933. 5¢.

1931. Paper and allied products, paper pulp (wood and other fiber), converted paper products, pulpwood consumption, and wood pulp production. 1934. (15th census, 1930.) 15¢.

Tanbark -- 1923. Forest products: consumption of vegetable tanning materials. 1924. 5¢.

Ties -- See Poles.

Veneers -- See Lumber.

OTHER LISTS OF PUBLICATIONS

Forestry, tree planting, wood, and lumber industries: list of publications relating to above subjects for sale by Supt. of Documents, Washington, E.C. 32nd edition, Price List No. 43. 1938.

Index to publications of the U. S. Dept. of Agr., 1901-25, by M. A. Bradley assisted by M. G. Hunt. Supt. of Documents, Washington, E. C., 1932. \$3.25. Same.--Supplement, 1926-30, 1935. \$1.50.

OTHER PUBLICATION LISTS ISSUED BY THE
FOREST PRODUCTS LABORATORY

The following lists of publications which deal with the other investigative projects of the Forest Products Laboratory are obtainable upon request:

Boxing and Crating -- Strength and serviceability of shipping containers, methods of packing.

Building Construction Subjects -- Partial list of Government publications of interest to architects, builders, retail lumbermen, and engineers.

Chemistry of Wood and Derived Products -- Chemical properties and uses of wood and chemical wood products, such as turpentine, alcohol, and acetic acid.

Glue and Plywood -- Development of waterproof glues, preparation and application of various glues, plywood manufacturing problems.

Growth, Structure, and Identification of Wood -- Structure and identification of wood; the effect of cellular structure of wood on its strength, shrinkage, permeability, and other properties; the influence of environmental factors, such as light, soil, moisture, and fire, on the quality of wood produced; and secretions of economic value produced by trees and their exploitation.

Fungous Defects in Forest Products (Pathology in cooperation with the Bureau of Plant Industry) -- Heart rots of trees; decay, molds, and stains in timber, in buildings, and in wood products; anti-septic properties of wood preservatives.

Mechanical Properties of Timber -- Strength of timber and factors affecting strength; design of wooden articles or parts where strength or resistance to external forces is of importance.

OTHER PUBLICATION LISTS ISSUED BY THE
FOREST PRODUCTS LABORATORY (continued)

Pulp and Paper -- Suitability of various woods for pulp and paper; fundamental principles underlying the pulping and bleaching processes; methods of technical control of these processes; relation of the chemical and physical properties of pulps and the relation of these properties to the paper-making qualities of the pulps; waste in the industry, for example, decay in wood and pulp, utilization of bark, white water losses, etc.

Seasoning of Wood -- Experimental and applied kiln drying, physical properties, air drying, steam bending.

Use of Wood in Aircraft Construction -- Strength, selection and character of aircraft wood and plywood; fabrication and assembly problems; methods of calculating the strength of wooden parts; structure of wood in relation to its properties and identification.

Wood Finishing Subjects -- Effect of coatings in preventing moisture absorption; painting characteristics of different woods, weathering of wood.

Wood Preservation -- Preservative materials and methods of application; durability and service records of treated and untreated wood in various forms.

